



Series: WDRXL-24-420MA

# Wireless 4-20mA Transmitter/Receiver System



## FEATURES & BENEFITS

- Provides Wireless Bridge for 4-20mA Loop Signal
- Receiver Output Mirrors Transmitter Input
- Receiver Provides 4-20mA or 1-5V DC Output
- Includes One Bi-directional Control Line
- Up To 1 Mile Line-of-site Transmit/Receive Distance
- 12-24V DC Operation
- Standard Plastic Din-rail Enclosures
- Pre-configured, Ready-To-Operate
- Sold As Transmitter/Receiver Matched Set
- License Free Radio Operation

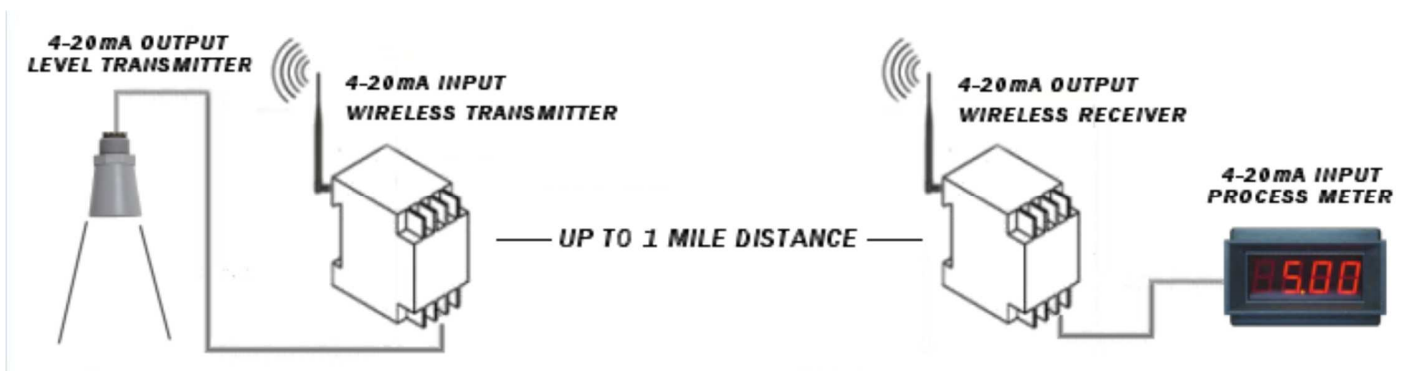
## APPLACATIONS

- Process Transmitter Signals
- Valve Positioning & Control
- Remote Sensor Monitoring

## DESCRIPTION

The WDRXL-24-420MA Wireless Analog Transmitter/Receiver System allows for remotely monitoring or controlling equipment from a distance up to 1 mile away using license free wireless 2.4GHz 802.15.4 communication. Each set features one 4-20mA analog signal input and output. Both the transmitter and receiver are also equipped with one contact closure input that is used to control an open-collector output on the opposing unit for additional control or alarm functionality

### Example Application: Level Transmitter Sending Readings to a Remote Process Meter



## General Specifications

**Radio Frequency:** ISM 2.4Ghz  
**Regulatory:** FCC Part 95 (No license required)  
**Process Input Lines:** One 4-20mA  
**Signal Transmit/Receive Accuracy:** +/- 0.5% of range  
**Open Input or Lost Signal Condition:** Output goes below 4mA  
**Reading Update Rate:** 250ms  
**Control Lines:** 1 Bi-directional  
**Antenna Connection:** RP-SMA  
**Antennas:** 5dbi, Omni-directional (Included)  
**Transmit/Receive Distance:**  
with included antennas: Indoor/Urban 100', Line-of-site 600'.  
with optional antennas: Indoor/Urban 300', Line-of-site 1 Mile.  
**Transmitter/Receiver Code Matching:** Factory set  
**Wire Connection:** Terminal Blocks  
**Operating Temperature:** -22 to 113 °F (-30 to 45 °C)  
**Enclosures:** Plastic Din-rail

## Series: WDRXL-24-420MA



Includes 5dbi Antennas and 9' Antenna Extension Cables



Optional Long Distance Antenna Set

## Transmitter Specifications

**RF Power Output:** 63mW  
**RF Output Impedance:** 50 Ohm nominal  
**RF Data Rate:** 250 kbps  
**Operating Power:** 12 - 24V DC @ 3W max  
**Control Line Input:** One Dry-contact Switch  
**Control Output:** One Open-collector, 12-24V DC, 1.2W Max  
**Process Input:** Analog 4-20mA

## Receiver Specifications

**Receive Sensitivity:** -100 dBm  
**Operating Power:** 12 - 24V DC @ 3W max  
**Control Line Input:** One Dry-contact Switch  
**Control Output:** One Open-collector, 12-24V DC, 1.2W Max  
**Process Output:** Analog 4-20mA or 1-5V DC

## Regulatory Approvals

FCC (USA) - OUR-XBEEPRO  
IC (Canada) - 4214A-XBEEPRO

Model Number	Description
WDRXL-24-420MA	Wireless Din-rail Mount 4-20mA Transmitter/Receiver Set (USA/CANADA)

## Available Options

Model Number	Description
DRWC-24-LRANT	Optional Long Range Directional Antenna (up to 1 Mile line-of-site)

Note: Continued product improvements make specifications subject to change without notice. Check [www.imagineinstruments.com](http://www.imagineinstruments.com) for the latest product information and updates

Level Sensor and Process Meter shown are not included and are shown for reference only.

© 2017 :: Imagine Instruments LLC :: 4500 Williams Drive, Ste 212-318 :: Georgetown, TX 78633 :: p. 512.778.6850  
e-mail: [info@imagineinstruments.com](mailto:info@imagineinstruments.com) :: [www.imagineinstruments.com](http://www.imagineinstruments.com)

Released: 12 December, 2017 :: Rev: A